CTEH® CENTER FOR TOXICOLOGY AND ENVIRONMENTAL HEALTH, LLC

Red River Supply Incident

Waste Management Plan

Prepared On Behalf Of:

GARNER™

The Emergency Response Company

Prepared By:

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CTEH CENTER FOR TOXICOLOGY AND ENVIRONMENTAL HEALTH, LLC

WASTE MANAGEMENT PLAN

Red River Supply Incident

This incident-specific Waste Management Plan (WMP) was prepared on behalf of the Environmental Unit supporting Unified Command, to manage waste generated from the facility fire at the Williston, ND location.

Prepared By:

_____ Date: _____

Submitted by EUL:

_____ Date: _____

Approved by Red River Supply (RP):

_____ Date: _____

Approved by SOSC:

_____ Date: _____

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1.0 BACKGROUND

On July 22, 2014, a fire engulfed Red River Supply, an oilfield chemical supply company located at 1202 East Broadway St in Williston, ND. A containment berm was constructed around the perimeter of the facility during fire suppression operations in an effort to contain runoff water.

2.0 PURPOSE

This Waste Management Plan (WMP) establishes and describes procedures and protocols to be followed by responders for all response operations materials, recovered and generated. The plan provides for the management, transportation, interim storage, and final disposal of the expected waste streams and categories that may be generated.

The collection, storage, transportation, treatment (if necessary), and disposal of waste will be conducted in a manner that is both safe and environmentally sound.

The anticipated waste generation activities may include, but are not limited to:

- Water recovery from fire suppression operations
- Storm water runoff Collection
- Petroleum materials recovered from skimming operations.
- Contaminated Sorbent Boom from skimming operations.
- Contaminated personal protective equipment (PPE) from response activities
- Excavation of impacted onsite soils
- Disposal of fire damaged equipment and materials.
- Water Generated during decontamination activities.

General guidelines:

- Always work safely in an environmentally sound manner and minimize waste.
- Consider waste management and generation in all actions.
- Staging of recovered materials and wastes shall be segregated to the extent possible.
- Report any accident or incident to your supervisor immediately.
- Reference the Waste Management Plan (WMP) for the specific process required for each waste type.
- Storage and transport of waste shall be managed to preclude secondary spills and to minimize contact with precipitation and runoff.

3.0 STAGING AREA DESCRIPTION

The primary staging area is land owned by Red River Supply located at East Broadway and East Dakota. (Appendix A)

4.0 SITE SPECIFIC SAFETY PLAN

The Incident -Specific Health and Safety Plan (HASP) h as been completed. All activities identified in this Waste Management Plan (WMP) are subject to the HASP.

The following best practices must be followed in the management of wastes generated in a spill response effort:

- Dispose or manage wastes and recover able materials in permitted or otherwise authorized locations and facilities only. Unauthorized disposal or management will not be tolerated.
- Obtain MSDS for all known products involved in waste management.
- Reduce waste generation whenever practical. This is known as waste minimization or pollution prevention.
- Reuse or recycle materials whenever practical. This not only lowers consumption of raw materials; it also eliminates the need for waste disposal. Recycling and reuse of recovered water is the preferred option.
- Avoid co -mingling wastes of different classifications. For example, never place non - hazardous wastes in the same container as hazardous waste. In addition, keep recyclable material separate from non -recyclable waste. It may be difficult or impos sible to separate wastes after they are co-mingled.
- Maintain good housekeeping practices. Employees and contractors should maintain neat, clean work areas to reduce the need for additional clean up and the associated waste.
- Properly store wastes to avoid releases to soil, water, or air, and to avoid consumption by wildlife, until they can be appropriately managed.
- Clearly identify waste containers. Use a label or other means to clearly identify the contents of containers of hazardous, non-hazardous and inert wastes.
- Document quantities and disposition of all wastes as instructed in the WMP . Waste tracking is required for all wastes. This information will be included in the final report developed at the conclusion of response activities.
- Recovered liquids (water, storm water runoff) should be collected and stored in as large a container as possible (UN approved frac tank, tanker truck, etc.) to facilitate uninterrupted recovery, and to minimize equipment decontamination requirements.
- Maintain security at all sites where waste is held.

5.0 TYPE OF WASTE GENERATED FROM RESPONSE ACTIONS

Wastes will be handled in accordance with federal and state hazardous waste regulations. Anticipated wastes may include:

- Contaminated Soil and/or Sediment;
- Recyclable Metals;
- Contaminated Personal Protective Equipment (PPE);
- Contaminated Rinsate Water from Decontamination Stations;
- Hazardous Waste from Spill Response Activities;
- Non-hazardous Waste Generated from Spill Response Activities;
- Wash Water, and Other Unspecified, Non-Hazardous waste (food waste, MSW, etc.);
- Equipment and materials consumed in the fire
- Investigative Derived Waste (IDW) (i.e. waste generated by sampling activities, if applicable)

Recovered fluids will be transferred from vac trucks to frac tanks located in the waste staging area.

- If there is not enough storage room at the staging area a secondary staging area may need to be established.

- Liquid m aterials collected may include water runoff or other re -usable or recyclable materials. All solid waste will be bagged, bundled or contained, and then segregated by the category of waste, as detailed in this plan.

6.0 CONTAINERIZATION AND STORAGE OF MATERIALS

Currently, the primary response effort is focused on containment, recovery, and salvage operations. Al l waste generated in association with this Incident cleanup and salvage operations will be managed at the designated waste staging area with secondary containment (Insert) located on Red River Supplies ' land at the corner of East Broadway and East Dakota , Williston, ND. Solid waste will be segregated and stockpiled on polyethylene sheeting onsite and covered with polyethylene sheeting . Liquid wastes will be stored in vacuum trucks and/or frac tanks, depending on volume recovered.

6.1. RECOVERED LIQUIDS

- **Waste Streams #1 :** Water recovered from fire suppression activities will be recovered utilizing vacuum trucks and stored in frac tanks. Once frac tanks ar e

full they will be labeled as such and sampled per section 7.2 Sampling and Analysis of this plan.

- **Waste S tream #2 :** Liquids recovered from skimming operations will be containerized into f rac tanks or drums, depending on volume recovered, and stored onsite. The liquid will be sampled per section 7.2 Sampling and Analysis of this plan.
- **Waste Stream #3 :** Water ge nerated during decontamination activities will be recovered from the decontamination stations utilizing vacuum trucks and stored in into f rac tanks or drums, depending on volume recovered, and stored onsite. The liquid will be sampled per section 7.2 Sampling and Analysis of this plan.
- **Waste Stream #4 :** Storm water from the site will be collected utilizing vacuum trucks and stored in into f rac tanks or drums, depending on volume recovered, and stored onsite. The liquid will be sampled per section 7.2 Sampl ing and Analysis of this plan.
- **Waste Stream #5 :** Liquids recovered from onsite containers will be field characterized as appropriate, and removed from the containers utilizing vacuum trucks and containerized into frac tanks or drums, depending on volume recovered, and stored onsite. The liquid will be sampled per section 7.2 Sampling and Analysis of this plan.

6.2. COLLECTION AND SEGREGATION OF SOLID WASTE

- **Waste Stream #6:** Recyclable Steel will be recovered from the site and taken through a rinse in the equipment decontamination station. The decontaminated steel will be stockpiled in the staging area. Empty drums for recycling will be verified to be RCRA Empty and rinsed before being crushed and staged for recycling.
- **Waste Stream #7:** Fire Impacted products will be stockpiled into piles of compatible products, as based on generator knowledge and exiting labeling. Stockpiles will be stored on polyethylene sheeting and covered with polyethylene sheeting to prevent contaminant runoff. Each stockpile will be sampled per section 7.2 Sampling and Analysis of this plan.
- **Waste Stream #8:** Contaminated sorbent boom will be bagged and containerized into lined roll-off boxes or drums, depending on volume recovered,

and stored onsite. The containers will be sampled per section 7.2 Sampling and Analysis of this plan.

- **Waste Stream #9:** Contaminated trash (Hot Trash) including PPE, Decontamination Rags, etc., will be bagged and containerized into lined roll-off boxes or drums, depending on volume recovered, and stored onsite. The containers will be characterized per section 7.2 Sampling and Analysis of this plan, if needed.
- **Waste Stream #10:** General trash (Cold trash) including all non-contaminated general trash and debris will be bagged and containerized into roll-off boxes or drums, depending on volume recovered, and stored onsite. No sampling or characterization is anticipated to be needed for this waste stream.

7.0 WASTE CHARACTERIZATION

7.1. GENERATOR KNOWLEDGE

Classification of the wastes / materials will be de termined based upon generator knowledge, review of Material Safety Data Sheets (MSDSs), review of existing labels and as a last resort, analytical sampling.

7.2. SAMPLING AND ANALYSIS

In the event identified waste requires characterization beyond that availabl e from generator knowledge and/or MSDS review, sampling and analysis will be conducted.

Waste Streams #1

One (1) liter samples will be collected from each Frac tank of collected fire suppression water utilizing clean polyethylene bailers. Each sample will be composited into a clean five (5) gallon bucket. Laboratory clean sample jars will be filled from the composited material and labeled, preserved, and managed in accordance with proper sampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses of Toxicity Characteristic Leachate Procedure (TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610 , and Reactivity, Corrosivity and Ignitability (RCI) EPA 9045 and 1010..

Waste Streams #2

One (1) liter samples will be collected from each container of collected liquid from skimming operations utilizing clean polyethylene bailers. Each sample will be composited into a clean five (5) gallon bucket. Laboratory clean sample jars w ill be filled

from the composited material and labeled, preserved, and managed in accordance with proper sampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses of Toxicity Characteristic Leachate Proced ure (TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and I gnitability (RCI) EPA 9045 and 1010..

Waste Streams #3

One (1) liter samples will be collected from each container of collec ted liquid from decontamination operations utilizing clean polyethylene bailers. Each sample will be composited into a clean five (5) gallon bucket. Laboratory clean sample jars will be filled from the composited material and labeled, preserved, and manag ed in accordance with proper sampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses of Toxicity Characteristic Leachate Procedure (TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and I gnitability (RCI) EPA 9045 and 1010..

Waste Streams #4

One (1) liter samples will be collected from each Frac tank of collected storm water utilizing clean polyethylene bailers. Each sample will be c omposited into a clean five (5) gallon bucket. Laboratory clean sample jars will be filled from the composited material and labeled, preserved, and managed in accordance with proper sampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses of Toxicity Characteristic Leachate Procedure (TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and Ignitability (RCI) EPA 9045 and 1010..

Waste Streams #5

One (1) liter samples will be collected from each Frac tank of collected liquid from onsite container pumping operations utilizing clean polyethylene bailers. Each sample will be composited into a clean five (5) gallon bucket. Laboratory clean sample jars will be filled from the composited material and labeled, preserved, and managed in accordance with proper sampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses of Toxicity Characteristic Leach ate Procedure

(TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and I gnitability (RCI) EPA 9045 and 1010.

Waste Stream #6

Recyclable Steel will be segregated and recovered from the s ite and taken through a rinse in the equipment decontamination station. The decontaminated steel will be stockpiled in the staging area. Empty drums for recycling will be verified to be RCRA Empty and rinsed before being crushed and staged for recycling. The wastes will be tracked as the leave site for transport to a licensed recycling facility.

Waste Stream #7

The site will be divided into labeled grids to assist in site orientation and waste tracking. Compatible material will be moved from the grids and placed into stockpiles in an area designated as a Stockpile area as the direction of the Waste Unit Leader (WUL). The origin grid of material placed into each stockpile will be recorded to verify waste stream tracking and handling.

Once stockpiles ar e of a sufficient size, no larger than 150 cubic yards, they will be covered until sampling operations can be completed.

15 grab samples will be collected from each stockpile utilizing clean stainless steel collection devices and placed into a clean bucket and homogenized /composited. Laboratory clean sample jars will be filled from the homogenized /composited material to make up 1 composite sample and labeled, preserved, and managed in accordance with proper s ampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses of Toxicity Characteristic Leachate Procedure (TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and I gnitability (RCI) EPA 9045 and 1010. Samples will be collected from Barite material on the site and analyzed for Naturally Occurring Radiative Material (NORM) method 901.1M Radium 226 and 228 Lead 210 Eichrom. Due to the lengthy turnaround time, these samples will be taken i n advance of the stockpiling.

Waste Stream #8

Contaminated sorbent boom will be bagged and containerized into roll-off boxes or drums, depending on volume recovered, and stored onsite. A 5 point grab sample taken from each corner and the middle of the roll-off container will be taken and analyzed for Toxicity Characteristic Leachate Procedure (TCLP), including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and Ignitability (RCI) EPA 9045 and 1010.

Waste Stream #9

Contaminated trash (Hot Trash) including PPE, Decontamination Rags, etc., will be bagged and containerized into lined roll-off boxes or drums, depending on volume recovered, and stored onsite. A five (5) point composite sample will be taken from each corner and the middle of all containers if material appears contaminated from a visual inspection. If no visible contamination is seen the material will be disposed of in a proper subtitle D landfill.

Waste Stream #10

General trash (Cold trash) including all non-contaminated general trash and debris will be bagged and containerized into roll-off boxes or drums, depending on volume recovered, and stored onsite. No sampling or characterization is anticipated to be needed for this waste stream. Material will be transported to a local municipal landfill for proper disposal.

Additional sampling may be required to fulfill disposal facility specific requirements or requests. If, these samples are required they will be collected and handled in accordance with the proper sampling and handling procedures and submitted to Pace Analytical in Minneapolis, MN for laboratory analyses

If waste characterization sampling is necessary, the WMC will notify the Environmental Unit Leader (EUL) who will assign a sample team for this effort and manage the results in accordance with the Data Management Plan (DMP) prepared for this incident.

8.0 HANDLING, TRANSPORT, AND DISPOSAL

Logistics will provide the support and services suppliers for the handling and transport of waste streams. Waste will be profiled, manifest ed, label ed and placard ed, and transport ed in accordance with appropriate State and Federal requirements.

8.1. TEMPORARY WASTE STORAGE FACILITY

All waste generated by the emergency spill response will be consolidated for final disposal or recycling, as appropriate, at the waste staging area located on the Red River Property adjacent to the work area . A daily report will be generated by the WMC and submitted to the UC as the waste is generated and/or transported for disposal.

8.2. ULTIMATE DISPOSAL

The WMC will manage characterization and manifesting of waste disposal and/or transportation for ultimate disposal at treatment, storage and disposal facilities (TSDFs).

Waste generated from this incident will be taken to the following TSDFs:

Facility	Address	Contact	Waste Accepted
Secure Entergy Services 13 Mile Landfill and Injection well.	13809 66th St Williston, ND 58801	701.609.5617	Industrial Solids and Industrial Liquids
Clean Harbors Sawyer Disposal Services	12400 247th Ave SE Sawyer, ND 58781	701.624.5622	Industrial Solids and Liquids
Prairie Disposal LLC R360	102C10 52nd St NW Tioga, NS 58852	701.664.3383 800.490.2106	Industrial Solids
City of Williston Landfill	5176 134th Ave NW Williston, ND 58801	701.577.8123	Cold trash
Pacific Steel and Recycling	13818 W Front St Williston, ND 58801	701.572.2373	Recyclable Steel

9.0 DOCUMENTATION AND WASTE STORAGE AREA CONTROLS

The WMC will be responsible for coordinating all daily waste stream activities. Coordination activities include, but are not limited to, the following:

- Integrates with the Environmental Unit for present and future tasks and may perform other functions as assigned.
- Regularly inspects that all containers are in good condition, boxes are properly tarped and free of liquids that could cause delays or problems during shipment, and notifies response personnel when containers need to be overpacked or the contents transferred to a more suitable container. Reports any discrepancies that need to be addressed.
- Inspects and labels all containers prior to the loading of the transportation vehicle to ensure that the load(s) will be received at the disposal facility without discrepancy.
- Ensures that complete waste manifests are included with all waste streams.
- Looks for ways to reduce the total waste stream.
- Assists with the identification, inventory, and proper storage of all waste materials related to this incident.
- Daily verbal and/or written reports to the OSC and EUL consisting of the following:
  - quantity of each category of waste generated for that operational period;
  - quantity of each category of waste stored on site; and
  - quantity of each category of waste transferred.

10.0 ADDITIONAL ASSISTANCE

If additional help or assistance is required, WMC will immediately contact his/her on-scene safety or environmental representative or contact the OSC or the Safety Officer.

11.0 EQUIPMENT, MANPOWER AND EXPENDITURES

Equipment, manpower, and expenditures must be controlled and documented. The following can be used for this purpose. If additional assistance is required for cost control, contact the Finance Section Chief (FSC). If additional assistance is required for purchasing or locating equipment or supplies, contact the Logistics Section Chief (LSC).

APPENDIX A

CTEH

Site Waste Staging Zones

Red River Supply Williston, OH - August 1, 2014

Coordinate System: WGS 1984 UTM Zone 13N
Projection: Transverse Mercator
Datum: WGS 1984

0 50 100 Feet